

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/CA2004/000816

International filing date (day/month/year)
03.06.2004

Priority date (day/month/year)
09.06.2003

International Patent Classification (IPC) or both national classification and IPC
H04B7/005

Applicant
SOMA NETWORKS, INC.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

88/257789
International application No.
PCT/CA2004/000816

IAP813501 377-10 08 DEC 2005

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/CA2004/000816

Box No. II Priority

1. ☒ The following document has not been furnished:

☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-7,10,22,23
	No: Claims	8,9,11-21,24,25
Inventive step (IS)	Yes: Claims	
	No: Claims	1-25
Industrial applicability (IA)	Yes: Claims	1-25
	No: Claims	

2. Citations and explanations

see separate sheet

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/CA2004/000816

Re Item V

1. The following documents are referred to in this communication:

D1 : WO 00/01094 A (NOKIA MOBILE PHONES LTD ; AHO ARI (FI); HAMALAINEN JARI (FI); KNUUTILA) 6 January 2000 (2000-01-06)

D2: US-A-5 991 618 (HALL SCOTT MAURICE) 23 November 1999 (1999-11-23)

2. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-7 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses (the references in parentheses applying to this document):

"A method of determining at a base station an estimate of the maximum available uplink transmit power of a subscriber station having a radio including foldback circuitry and maintaining that estimate at said base station, said method comprising: transmitting (claims 1-2,10) a message from said subscriber station to said base station whenever an incident of foldback occurs at said subscriber station; decreasing (claim 6) the maintained estimate of said maximum uplink transmit power of said subscriber station at said base station (claim 10) when said base station receives said message from said subscriber station; and ~~increasing said maintained estimate at said base station when a predefined period of time has lapsed after said base station received said message~~".

The subject-matter of claim 1 therefore differs from D1 in that the method further comprises the step of increasing said maintained estimate at said base station when a predefined period of time has lapsed after said base station received said message.

The subject-matter of claim 1 is therefore novel (Article 33(2) PCT).

The problem to be solved by the present invention may therefore be regarded as when an existing user may increase its transmitted power to operate in a communication mode with a higher level of service.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) because the feature of increasing said maintained estimate at said base station whenever possible, whether or not a predefined period of time has lapsed after said base station received said message, is a normal design procedure (cf. D2: column 6, lines 55-61). Its inclusion in the apparatus described in document D1 would therefore be an obvious design possibility for the skilled person in order to solve the problem posed.

Dependent claims 2-7 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1,D2 and the corresponding passages cited in the search report.

3. The document **D1** discloses (the references in parentheses applying to this document):

"A system for transmitting data comprising:

a plurality of subscriber station each operable to transmit a message indicating an incident of foldback in said subscriber station (claims 1,2); and
a base station operable to maintain an estimate of the maximum available uplink transmit power for each said subscriber station and to receive any said messages from said plurality of subscriber stations (claim 10) and to reduce said maintained estimate for each said subscriber station which has sent any said message (claim 6)".

The subject-matter of claim 8 is thus not new (Article 33(2) PCT).

Dependent claims 9-14 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1,D2 and the corresponding passages cited in the search report.

4. The document **D1** discloses (the references in parentheses applying to this document):

"A system for transmitting data comprising:

at least one subscriber station operable to transmit at a plurality of different rates, said at least one subscriber station further operable to transmit a message indicating

an incident of foldback in said at least one subscriber station (claims 1,2); and a base station operable, upon receiving said message, to reduce the data rate for said at least one subscriber station (claims 8,10)".

The subject-matter of claim 15 is thus not new (Article 33(2) PCT).

5. The document **D1** discloses (the references in parentheses applying to this document):

"A subscriber station having a radio including foldback circuitry and operable to transmit a message indicating any incidents of foldback in said radio to a base station (claims 21,30)".

The subject-matter of claim 16 is thus not new (Article 33(2) PCT).

Dependent claims 17-18 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1,D2 and the corresponding passages cited in the search report.

6. The document **D1** discloses (the references in parentheses applying to this document):

"A subscriber station having a radio with foldback circuitry, said subscriber station operable to transmit data at a plurality of different data rates, and said subscriber station further operable to transmit data at a lower rate from said plurality of different data rates after experiencing foldback in said foldback circuitry (claims 21,28,30)".

The subject-matter of claim 19 is thus not new (Article 33(2) PCT).

7. The document **D1** discloses (the references in parentheses applying to this document):

"A base station operable to receive messages from a remote subscriber station and further operable to adjust an estimate of maximum available uplink transmit power maintained for said subscriber station upon receiving a message indicating an incident of foldback in the radio of said subscriber station (claims 21,26,30)".

The subject-matter of claim 20 is thus not new (Article 33(2) PCT).

Dependent claims 21-24 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step, see documents D1,D2 and the corresponding passages cited in the search report.

8. The document **D1** discloses (the references in parentheses applying to this document):

"A base station operable to reduce the data rate of a subscriber station, upon receiving a message from said subscriber station indicating an incident of foldback in the radio of said subscriber station (claims 21,28,30)".

The subject-matter of claim 25 is thus not new (Article 33(2) PCT).